

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE COMMUNICABLE DISEASE CENTER

POLIOMYELITIS SURVEILLANCE UNIT
50 7TH STREET, N.E., ATLANTA, GA.

Phone Numbers:

1. Poliomyelitis Surveillance Unit

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SPECIAL NOTE

The information provided in this report represents the latest data reported to the Poliomyelitis Surveillance Unit from State Health Departments, Epidemic Intelligence Service Officers, participating laboratories, and other pertinent sources. Much of the material is preliminary in nature and is subject to confirmation and change. It is distributed for the benefit of all participants with the understanding that it will not be released to the press or to unauthorized persons. State Health Officers, of course, are free to reveal any information they may wish concerning data from their State.

The recent occurrence of cases of poliomyelitis among children who had recently been inoculated with poliomyelitis vaccine manufactured by Cutter Laboratories dramatically illustrated the need for establishing a nationwide system of collecting accurate and detailed reports on all cases of poliomyelitis in the country. It was imperative to determine as rapidly as possible the nature of the apparent association of cases with Cutter Vaccine.

Similar associations with vaccines from other manufacturers might occur at any time. As increasing numbers of children become immunized and as the normal poliomyelitis season approaches, it may be expected by mere coincidence that many children will contract poliomyelitis at some time following vaccination. In order to interpret such occurrences properly, it is necessary that accurate current information be available on a national basis in far more detail and more rapidly than is now available through established morbidity reporting channels.

Accordingly, on April 28, one day following the discovery of the association of cases of poliomyelitis with Cutter Vaccine and its withdrawal from use, the Surgeon General of the Public Health Service directed the establishment of the Poliomyelitis Surveillance Unit within the Communicable Disease Center in Atlanta. The two documents establishing this Unit are attached: 1) The news release of April 28, 1955, and 2) the telegram to all Regional Medical Directors of the Public Health Service from Otis L. Anderson, Chief, Bureau of State Services of the Public Health Service.

The Surveillance Program will serve broad functions. The accurate and detailed information collected and disseminated currently to Federal and State Health Officials and participating laboratories should serve to guide the most effective application of the limited supplies of vaccine available in 1955. The wise use of these supplies should accelerate the decline of poliomyelitis throughout the country, leading, it may be hoped, to rapid disappearance of the disease.

With the decline in incidence of poliomyelitis, the many types of disease that may simulate poliomyelitis will assume increasing relative importance to the public, to physicians, and to health officers. In many instances, diseases such as arthropod-borne viral encephalitis, and other types of encephalitis, or Coxsackie virus infections or leptospirosis, or many types of meningitis may well be diagnosed as poliomyelitis. Unless such a diagnosis is promptly corrected, much public concern is likely to be felt. Unnecessary loss in confidence in the poliomyelitis vaccine might develop. A National Surveillance Program for poliomyelitis shall bring to the attention of all health officers the existence of these types of disease and should serve to achieve prompter and more correct diagnoses when they occur. Expanded laboratory services will be needed to make these correct diagnoses.

Included with this first Poliomyelitis Surveillance Report is a cumulative summary of the accepted cases of poliomyelitis associated with the prior administration of vaccine that have been reported up to 2:00 P.M. Sunday, May 1st. A total of 22 paralytic cases and one non-paralytic case have been associated with prior inoculation of Cutter Vaccine of several different lot numbers. In many instances it has not been possible specifically to identify the lot a particular patient had received.

In a high proportion of cases there is a marked correlation between the site of inoculation and the site of first paralysis. The intervals between inoculation and date of first paralysis have varied from 6 to 13 days with the majority falling between 8 and 10 days. Most of the cases have shown a short prodromal period of symptoms prior to recognized paralysis.

The cases have been concentrated largely in California 15 cases, and Idaho 6, with single cases in Colorado and Illinois. Additional suspect cases are under investigation in California, Idaho, Missouri, and Washington State.

Further information concerning the relation of the occurrence of these cases to the distribution of Cutter Vaccine will be presented in future reports when more basic data are available.

A total of 3 cases, two paralytic and one non-paralytic, have occurred in association with Lilly Vaccine. One of these was in Georgia and two in Louisiana. A correlation between site of inoculation and site of first paralysis was not observed in any of these cases.

Etiological studies of these cases are now being undertaken in the following laboratories:

1. Virus and Rickettsial Laboratory
California Department of Public Health
Berkeley, California
Dr. Edwin H. Lennette, Director
2. Rocky Mountain Laboratory
National Institutes of Health
Hamilton, Montana
Dr. Carl Larson, Director
Dr. Karl Eklund, Virologist
3. Division of Laboratories
Illinois Department of Public Health
Dr. Howard Shaughnessey, Director
4. School of Medicine
Tulane University, New Orleans, La.
Dr. John P. Fox
5. Virus and Rickettsial Laboratory
Communicable Disease Center, PHS
Montgomery, Alabama
Dr. Morris Schaeffer, Chief

As additional cases of poliomyelitis are reported either among vaccinated or non-vaccinated persons, it is hoped that immediate etiological studies will be initiated. When laboratory services cannot be arranged in the area of the cases, the Montgomery Laboratory of CDC stands ready within the limits of its capacity to assist.

Further data regarding laboratory findings and recommended procedures for submission of specimens to laboratories will be sent with future reports.

A brief daily report of new cases and corrections of the data presented in the cumulative summary will be sent to all participants. (See attached list). A weekly summary will also be a regular feature of the program.

Alexander D. Langmuir
Alexander D. Langmuir, M. D.
Chief, Epidemiology Branch

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PUBLIC HEALTH SERVICE COMMUNICABLE DISEASE CENTER

POLIOMYELITIS SURVEILLANCE UNIT

Accepted Cases Associated with Poliomyelitis Vaccine

Weekly Cumulative Summary

PSU Case No	Residence	Init- ials	Age	Sex	Date Incc	Date 1st Symp	Date 1st Para	Site Inoc	Site 1st Para	Mfr	Lot No	Remarks
<u>California</u>												
Cal-1	San Diego	LV	7	M	4-16	4-20	4-23	LA	LA	C	E6038? E5970 E5928?	
Cal-2	San Diego	JMcD	7	M	4-16	4-22	4-24	LA	LA	C	"	
Cal-3	San Diego	EC	8	F	4-16	4-25	4-27	LA	LA	C	"	
Cal-4	Ventura	MD	1	M	4-16	4-21	4-25	LA	LA	C	E5971	
Cal-5	Napa	GK	1	F	4-16	4-21	4-24	LA	LA	C	E6045? E5974?	
Cal-6	Oakland	RF	4	M	4-18	4-24	4-26	LA	LA	C	E6045	
Cal-7	Oakland	JB	3	F	4-14	4-21	4-27	?	RL	C	E6045	
Cal-8	Los Angeles	MB	5	F	4-19	4-24	?	?	LA	C	E5971	
Cal-9	Los Angeles County	RN	1	M	4-19	4-25	?	?	?	C	E5972	Quadriplegia
Cal-10	Los Angeles County	AW	6	M	4-18	4-25	4-28	LA	LA	C	?	

PSU Case No	Residence	Init- ials	Age	Sex	Date Inoc	Date 1st Symp	Date 1st Para
Cal-11	Riverside	DM	8	F	4-18	4-23	4-26
Cal-12	Stanislaw County	CS	2	F	4-17	4-25	4-27
Cal-13	San Diego	DS	7	F	4-16	4-25	?
Cal-14	San Diego	JMcC	6	F	4-16	4-22	None
Cal-15	Santa Barbara	AG	4	F	4-18	4-23	4-28
<u>Colorado</u>							
Colo-1	Denver	SC	1	M	4-15	4-21	4-24
<u>Georgia</u>							
Ga-1	Columbus	?	6	M	4-19	4-23	4-27
<u>Idaho</u>							
Ida-1	Pocatello	SP	7	F	4-18	4-23	4-24
Ida-2	Pocatello	JS	6	M	4-20	4-26	4-27
Ida-3	Orofino	DC	8	F	4-21	4-26	4-27
Ida-4	Lewiston	BP	7	F	4-19	4-24	4-27
Ida-5	Moscow	JLK	8	F	4-19	4-25	4-27

Site Inoc	Site lst Para	Mfr	Lct Nc	Remarks
RL	RL	C	E5972	
LA	?	C	E6045	
LA	LA	C	E6038? E5970 E5928?	
LA	None	C	"	
RL	RL	C	E5971	
LA	?	C	E5972	Quadriplegia
RA	?	L	5081	Mild bulbar
LA	LA	C	E6039? E6058?	Died 4-27, Fulminating bulbar
LA	LA	C	E6039? E6058?	
RA	RA	C	E6058	
LA	LA	C	E6058	
LA	LA	C	E6058	Bulbar, Died 5-1

PSU Case No	Residence	Init- ials	Age	Sex	Date Inoc	Date 1st Symp	Date 1st Para
Ida-6	Moscow	CS	7	F	4-20	4-28	4-29
							<u>Illinois</u>
Ill-1	Chicago	?	1	M	4-16	?	4-25
							<u>Louisiana</u>
La-1	Winnsboro	?B	6	M	4-19	4-19	4-28
La-2	Monroe	?S	6	F	4-21	4-22	None

Code of Abbreviations:

PSU - Poliomyelitis Surveillance Unit

Mfr - Manufacturer

C - Cutter Laboratories

L - Lilly Laboratories

LA - Left Arm LL - Left Leg or Buttocks

RA - Right Arm RL - Right Leg or Buttocks

Site Inoc	Site lst Para	Mfr	Lot No	Remarks
LA	LA	C	E6058	
Leg	?	C	E6044	Paraplegia
LA	Legs	L	5081	
Arm	None	L	5081	

May 1, 1955

Attachment No. 1 to
Poliomyelitis Surveillance Report No. 1

The following press release was issued by the Surgeon General of the Public Health Service at 7 PM Thursday, April 28, 1955.

"THE PUBLIC HEALTH SERVICE, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, ANNOUNCED TODAY THAT IT HAS ESTABLISHED AN INTENSIVE NETWORK FOR REPORTING ON EACH CASE OF POLIO THAT OCCURS THIS YEAR.

"THE SERVICE STATED THAT THIS STEP WAS IN ADDITION TO THE MEASURES ALREADY TAKEN TO CLARIFY THE STATUS OF THE POLIOMYELITIS VACCINE MANUFACTURED BY THE CUTTER LABORATORIES IN BERKELEY, CALIFORNIA.

"THE GROUP OF PHYSICIANS, STATISTICIANS, AND OTHER SPECIALISTS IN IDENTIFYING, REPORTING AND INTERPRETING THE OCCURRENCE OF INFECTIOUS DISEASE AMONG LARGE POPULATION GROUPS HAS ITS HEADQUARTERS AT THE SERVICE'S COMMUNICABLE DISEASE CENTER IN ATLANTA, GEORGIA. THE GROUP, WHICH IS UNDER THE IMMEDIATE DIRECTION OF DR. ALEXANDER LANGMUIR, ASSISTS STATES TO TRACK DOWN OUTBREAKS OF COMMUNICABLE DISEASES.

"THE GROUP WILL WORK WITH STATE MEDICAL AND PUBLIC HEALTH AUTHORITIES, WITH EMPHASIS ON CONFIRMATION OF REPORTED CASES, DATA ON WHETHER THE CASE HAS BEEN VACCINATED THIS YEAR OR LAST, LABORATORY CONFIRMATION OF DIAGNOSIS, AND CORRELATION OF DATA TO PROVIDE A DAILY RECORD. WEEKLY SUMMARIES OF POLIOMYELITIS PICTURE WILL BE ISSUED THROUGHOUT THE SUMMER.

"THIS EPIDEMIOLOGICAL STUDY WILL YIELD DATA ON THE CURRENT LARGE-SCALE IMMUNIZATION PROGRAM AND WILL BE VERY USEFUL TO THE CONTINUING EVALUATION OF THE PROGRAM ON A STATE AND LOCAL LEVEL, THE SERVICE SAID.

"THE LANGMUIR GROUP IS NOW PROVIDING SPECIAL ASSISTANCE TO THE STATE OF CALIFORNIA, WHERE MOST OF THE REPORTED CASES OF POLIOMYELITIS HAVE OCCURRED.

"IN MAKING THIS ANNOUNCEMENT, THE SURGEON GENERAL OF THE PUBLIC HEALTH SERVICE, DR. LEONARD A. SCHEELE, REITERATED HIS STATEMENT OF YESTERDAY THAT THE WITHDRAWAL OF CUTTER VACCINE FROM DISTRIBUTION DOES NOT IMPLY THAT THERE IS ANY CORRELATION BETWEEN THE VACCINE AND THE OCCURRENCE OF POLIOMYELITIS.

"THERE HAVE BEEN ONLY THREE NEW CASES OF POLIOMYELITIS REPORTED AMONG VACCINATED CHILDREN IN THE LAST TWENTY-FOUR HOURS, ' HE SAID. 'IT CANNOT BE EXPECTED THAT VACCINE WOULD PROVIDE PROTECTION SO SOON AFTER A FIRST INJECTION. ACCORDING TO THE STUDY OF DR. FRANCIS, MOREOVER, THE SALK VACCINE IS 60-90 PERCENT EFFECTIVE AFTER FULL IMMUNIZATION. THUS IN ANY LARGE GROUP OF CHILDREN WHO HAVE RECEIVED THE FULL COURSE OF IMMUNIZATION, IT CAN BE EXPECTED THAT THERE WILL BE SOME WHO WILL CONTACT THE DISEASE.

"THERE IS NOTHING UNUSUAL ABOUT THE POLIO PICTURE ACROSS THE NATION,' HE ADDED. 'IT FOLLOWS VERY CLOSE TO THE FIVE YEAR MEDIAN.'"

May 1, 1955

Attachment No. 2 to
Poliomyelitis Surveillance Report No. 1

The following telegram was sent night letter to each Regional Medical Director of the Public Health Service on April 30, 1955.

"THE SURGEON GENERAL HAS REQUESTED YOU TO NOTIFY BY TELEPHONE ALL STATE AND TERRITORIAL HEALTH OFFICERS IN YOUR REGION OF ESTABLISHMENT POLIOMYELITIS SURVEILLANCE UNIT IN THE COMMUNICABLE DISEASE CENTER ATLANTA. THIS UNIT IS DIRECTED BY DR. A D LANGMUIR WITH DR. NEAL NATHANSON EPIDEMIC INTELLIGENCE SERVICE PHYSICIAN AND MR. EARL DIAMOND EIS STATISTICIAN AS CENTRAL STAFF FULL RESOURCES EPIDEMIOLOGY BRANCH INCLUDING EIS OFFICERS ARE ASSIGNED FOR FIRST PRIORITY DUTY TO SERVE AT REQUEST OF STATE TO HELP WHERE NEEDED TO INVESTIGATE ALL CASES OF POLIOMYELITIS THIS YEAR PLAN NATION WIDE COVERAGE.

"COMMITTEE OF POLIOMYELITIS EXPERTS AND IMMUNOLOGISTS MEETING IN WASHINGTON APRIL 29 AND 30 STRESS URGENCY OF DETAILED STUDIES TO DETERMINE THROUGHOUT VACCINATION PERIOD WHICH OF THREE EXPLANATIONS IS APPLICABLE TO CASES. FIRST: IS CURRENT POLIOMYELITIS IN VACCINATED INDIVIDUALS PURE COINCIDENCE? SECOND: HAS INJECTION PROVOKED PARALYSIS AS HAS BEEN OBSERVED AFTER USE OF OTHER VACCINE? THIRD: WAS A LIVE VIRUS INTRODUCED BY INFECTED VACCINE?

"BASIC OPERATION OF PROGRAM IS ESTABLISHMENTS NATIONAL REGISTRY OF DETAILED INFORMATION ALL POLIOMYELITIS CASES FROM APRIL 12 1955 UNTIL FURTHER NOTICE. MINIMUM ESSENTIAL DATA ON EACH CASE ARE: PATIENTS INITIALS AGE SEX RESIDENCE DATE ONSET SYMPTOMS DATE AND SITE FIRST PARALYSIS EXTENT OF PARALYSIS HISTORY OF INNOCULATION POLIO VACCINE WITH DATE LOT NO. MANUFACTURER AND SITE OF INNOCULATION. SPECIAL FORM FOR THIS INFORMATION AVAILABLE TO ALL EIS OFFICERS AND TO THE STATES UPON REQUEST. URGE IMMEDIATE PRELIMINARY REPORTS FROM STATES ON ALL NEW CASES WITH SUPPLEMENTAL REPORTS TO COMPLETE THE MINIMUM ESSENTIAL DATA WHEN IT BECOMES AVAILABLE.

"REPORTS SHOULD BE SENT AT LEAST DAILY DIRECTLY TO SURVEILLANCE UNIT IN ATLANTA BY GOVERNMENT TELETYPE TELEGRAPH OR TELEPHONE COLLECT. IMMEDIATE REPORTS OF SIGNIFICANT CASES MOST IMPORTANT. TELEPHONE NOS. DAYTIME 8AM TO 530PM EST ELGIN 3311, 530PM TO 10PM ELGIN 2176.

"EVERY CASE OF POLIOMYELITIS SHOULD HAVE LABORATORY CONFIRMATION IF POSSIBLE BY ATTEMPTED VIRUS ISOLATION FROM FECES WITH TYPING. ACUTE AND CONVALESCENT SERA SHOULD ALSO BE COLLECTED FOR APPROPRIATE SEROLOGY. MONTGOMERY LABORATORY OF CDC AVAILABLE TO SERVE ALL STATES OR TERRITORIES BUT RECOMMEND UTILIZATION OF LABORATORIES IN THE AREA WHEN PREPARED TO DO ISOLATION AND TYPING VIRUS. ISOLATION FROM HOUSEHOLD CONTACTS ALSO IMPORTANT. REGULAR WEEKLY REPORTS OF COMMUNICABLE DISEASES INCLUDING POLIOMYELITIS SHOULD CONTINUE WITHOUT CHANGE THROUGH REGULAR CHANNELS TO NATIONAL OFFICE OF VITAL STATISTICS. URGE PROMPTEST AND FULLEST PARTICIPATION ALL STATES AND TERRITORIES IN THIS PROGRAM. REQUEST EACH STATE HEALTH OFFICER TO DESIGNATE A POLIOMYELITIS REPORTING OFFICER TO SERVE AS CONTACT POINT FOR CONTINUING DIRECT COMMUNICATION BETWEEN SURVEILLANCE UNIT AND EACH STATE AS SOON AS YOU LEARN WHO THIS INDIVIDUAL IS NOTIFY CHIEF CDC.

